

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-10 (Cancelled).

Claim 11 (New): An information storage medium comprising:

a system lead-in area, a connection area located outside the system lead-in area, a data lead-in area located outside the connection area, and a data area located outside the data lead-in area are provided, a track pitch and a minimum pit length in the system lead-in area are longer than a track pitch and a minimum pit length in the data lead-in area and the data area, wherein

an error correction code (ECC) block is formed from 32 consecutive scrambled frames,

each left half row in an odd scrambled frame is exchanged for a right half row,

each scrambled frame is arranged in the ECC block,

one scrambled frame includes $(172 \text{ bytes} \times 2) \times 6$ rows,

16 bytes of an outer-code parity (PO) are attached to each of 172×2 columns to form an outer code of RS (Read-Solomon) (208, 192, 17), and

10 bytes of an inner-parity code (PI) are attached to each of 208×2 half rows which includes the PO to form an inner code of RS (182, 172, 11).

Claim 12 (New): A method for recording information in an information storage medium wherein a system lead-in area, a connection area located outside the system lead-in area, a data lead-in area located outside the connection area, and a data area located outside the data lead-in area are provided, a track pitch and a minimum pit length in the system lead-

in area are longer than a track pitch and a minimum pit length in the data lead-in area and the data area,

an error correction code (ECC) block is formed from 32 consecutive scrambled frames,

each left half row in an odd scrambled frame is exchanged for a right half row,

each scrambled frame is arranged in the ECC block,

one scrambled frame includes $(172 \text{ bytes} \times 2) \times 6$ rows,

16 bytes of an outer-code parity (PO) are attached to each of 172×2 columns to form an outer code of RS (Read-Solomon) (208, 192, 17), and

10 bytes of an inner-parity code (PI) are attached to each of 208×2 half rows which includes the PO to form an inner code of RS (182, 172, 11), the method comprising:

forming ECC blocks; and

recording information in the data area in a unit of ECC blocks.

Claim 13 (New): An apparatus for recording information in an information storage medium wherein a system lead-in area, a connection area located outside the system lead-in area, a data lead-in area located outside the connection area, and a data area located outside the data lead-in area are provided, a track pitch and a minimum pit length in the system lead-in area are longer than a track pitch and a minimum pit length in the data lead-in area and the data area,

an error correction code (ECC) block is formed from 32 consecutive scrambled frames,

each left half row in an odd scrambled frame is exchanged for a right half row,

each scrambled frame is arranged in the ECC block,

one scrambled frame includes $(172 \text{ bytes} \times 2) \times 6$ rows,

16 bytes of an outer-code parity (PO) are attached to each of 172 x 2 columns to form an outer code of RS (Read-Solomon) (208, 192, 17), and

10 bytes of an inner-parity code (PI) are attached to each of 208 x 2 half rows which includes the PO to form an inner code of RS (182, 172, 11), the apparatus comprising:

an ECC forming unit configured to form ECC blocks; and

a recording unit configured to record information in the data area in a unit of ECC blocks.

Claim 14 (New): A method for reproducing information from an information storage medium wherein a system lead-in area, a connection area located outside the system lead-in area, a data lead-in area located outside the connection area, and a data area located outside the data lead-in area are provided, a track pitch and a minimum pit length in the system lead-in area are longer than a track pitch and a minimum pit length in the data lead-in area and the data area,

an error correction code (ECC) block is formed from 32 consecutive scrambled frames,

each left half row in an odd scrambled frame is exchanged for a right half row,

each scrambled frame is arranged in the ECC block,

one scrambled frame includes (172 bytes x 2) x 6 rows,

16 bytes of an outer-code parity (PO) are attached to each of 172 x 2 columns to form an outer code of RS (Read-Solomon) (208, 192, 17), and

10 bytes of an inner-parity code (PI) are attached to each of 208 x 2 half rows which includes the PO to form an inner code of RS (182, 172, 11), the method comprising:

reproducing data of the ECC blocks; and

correcting certain kinds of errors in the reproduced data.

Claim 15 (New): An apparatus for reproducing information from an information storage medium wherein a system lead-in area, a connection area located outside the system lead-in area, a data lead-in area located outside the connection area, and a data area located outside the data lead-in area are provided, a track pitch and a minimum pit length in the system lead-in area are longer than a track pitch and a minimum pit length in the data lead-in area and the data area,

an error correction code (ECC) block is formed from 32 consecutive scrambled frames,

each left half row in an odd scrambled frame is exchanged for a right half row,

each scrambled frame is arranged in the ECC block,

one scrambled frame includes $(172 \text{ bytes} \times 2) \times 6$ rows,

16 bytes of an outer-code parity (PO) are attached to each of 172×2 columns to form an outer code of RS (Read-Solomon) $(208, 192, 17)$, and

10 bytes of an inner-parity code (PI) are attached to each of 208×2 half rows which includes the PO to form an inner code of RS $(182, 172, 11)$, the apparatus comprising:

an optical head configured to reproduce data of the ECC blocks; and

a correcting unit configured to correct certain kinds of errors in the reproduced data.